CLAIMS

1. A laser system, comprising:

a base plate;

a heat sink that is connected to the base plate and that is nearly perpendicular thereto;

a heat generation device or a heat absorption device that is connected to the heat sink and that is nearly perpendicular to the base plate; and

a laser section that is connected to the heat generation device or the heat absorption device and that is nearly perpendicular to the base plate, one surface of the heat generation device or the heat absorption device being connected to the laser section, the other surface of the heat generation device or the heat absorption device being connected to the heat sink,

wherein the laser section has a semiconductor laser device, a lens, a grating, and a support member, the semiconductor laser device, the lens, and the grating composing an external cavity type semiconductor laser, the support member supporting the external cavity type semiconductor laser,

wherein the laser section is connected to the heat generation device or the heat absorption device connected to the heat sink by the support member, and

wherein the external cavity type semiconductor laser is covered by the support member and a lid that has heat resistance.

2. The laser system as set forth in claim 1, wherein the base plate and the heat sink are connected through a heat insulation member.

3. The laser system as set forth in claim 1, wherein a space is formed between the base plate and the laser section, the space having a predetermined height.

4. The laser system as set forth in claim 3, wherein the predetermined height is at least 10 mm.

5. The laser system as set forth in claim 4, wherein a heat insulation member is disposed in the space having the predetermined height.

6. The laser system as set forth in claim 2, wherein a space is formed between the base plate and the laser section, the space having a predetermined height.

7. The laser system as set forth in claim 6, wherein the predetermined height is at least 10 mm.

8. The laser system as set forth in claim 7, wherein a heat insulation member is disposed in the space having the predetermined height.

9. The laser system as set forth in claim 1, wherein the heat generation device or the heat absorption device is a Peltier device.

10. The laser system as set forth in claim 1,

further comprising:

temperature detection means for detecting the temperature of the laser section.

11. A laser system, comprising:

a heat sink that is directly connected to a surface plate and that is nearly perpendicular to the surface plate;

a heat generation device or a heat absorption device that is connected to the heat sink and that is nearly perpendicular to the surface plate; and

a laser section that is connected to the heat generation device or the heat absorption device and that is nearly perpendicular to the surface plate, one surface of the heat generation device or the heat absorption device being connected to the laser section, the other surface of the heat generation device or the heat absorption device being connected to the heat sink,

wherein the laser section has a semiconductor laser device, a lens, a grating, and a support member, the semiconductor laser device, the lens, and the grating composing an external cavity type semiconductor laser, the support member supporting the external cavity type semiconductor laser,

wherein the laser section is connected to the heat generation device or the heat absorption device connected to the heat sink by the support member, and

wherein the external cavity type

semiconductor laser is covered by the support member and a lid that has heat resistance.

12. The laser system as set forth in claim 11, wherein the surface plate and the heat sink are connected through a heat insulation member.

13. The laser system as set forth in claim 11, wherein a space is formed between the surface plate and the laser section, the space having a predetermined height.

14. The laser system as set forth in claim 13, wherein the predetermined height is at least 10 mm.

15. The laser system as set forth in claim 14, wherein a heat insulation member is disposed in the space having the predetermined height.

16. The laser system as set forth in claim 12, wherein a space is formed between the surface plate and the laser section, the space having a predetermined height.

17. The laser system as set forth in claim 16, wherein the predetermined height is at least 10 mm.

18. The laser system as set forth in claim 17, wherein a heat insulation member is disposed in the space having the predetermined height.

19. The laser system as set forth in claim 11, wherein the heat generation device or the

heat absorption device is a Peltier device.

20. The laser system as set forth in claim 11, further comprising:

temperature detection means for detecting the temperature of the laser section.